

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) Process for the purification of water, characterized in that a solution containing a proportion of a mixed microbiotic culture is added to the water in an environment having catalytic activity.
2. (Original) Process in accordance with claim 1, characterized in that the catalytically active environment is brought about by catalytically active surfaces.
3. (Original) Process in accordance with claim 2, characterized in that a ceramic or polymer surface doped with catalyst substances is used as said catalytically active surface.
4. (Original) Process in accordance with claim 3, characterized in that organic and/or inorganic catalyst compounds are used as catalyst substances.
5. (Currently Amended) Process in accordance with claim 3 ~~or claim 4~~, characterized in that titanium dioxide (TiO₂) is contained in said ceramic surface.
6. (Original) Process in accordance with claim 5, characterized in that said ceramic surface used is a tile.
7. (Currently Amended) Process in accordance with ~~at least one of~~ claims 1 to 6, characterized in that said mixed culture contains photosynthetically active microorganisms and luminous bacteria in a biological solution.

8. (Original) Process in accordance with claim 7, characterized in that prochlorophytes, cyanobacteria, green sulphur bacteria, purple bacteria, chloroflexus-type forms and heliobacterium and heliobacillus-type forms as well as mixtures of two or more of these are contained in said mixture as facultatively phototropic microorganisms.

9. (Currently Amended) Process in accordance with claim 7 or 8, characterized in that Photobacterium phosphoreum, Vibrio fischeri, Vibrio harveyi, Pseudomonas lucifera or Beneckea or mixtures of at least two of these are contained in said mixture as luminous bacteria.

10. (Currently Amended) Process in accordance with ~~at least one of claims 1 to 9~~, characterized in that said solution contains as secondary constituents plant extracts, enzymes, trace elements, polysaccharides, alginic derivatives, other microorganisms, either singly or in combination.

11. (Currently Amended) Process in accordance with ~~at least one of the preceding claims 1~~, characterized in that the water to be purified is stirred continuously or intermittently.

12. (Currently Amended) Application of the process in accordance with ~~at least one of claims 1 to 11~~ for the purification of effluents.

13. (Original) Application in accordance with claim 12, characterized in that pump sumps and waters in purification plants are purified.

14. (Currently Amended) Application of the process in accordance with at least one of claims 1 to 11 for the purification of waters in public and private installations.

15. (Original) Application in accordance with claim 14 for removing algae.